# HW1: UML Report

Haohan Wang

ID: haohanw

## UML Design

1. An **IntelligentInformationSystem** is composed of a **sequence** of **data processing operations or phases**. Each **phase** accepts certain **data types** as **input** and produces certain **data types** as **output**. Each **phase** can be implemented by any number of **algorithms** or **options**. Each **option** is implemented by a specific **Java class**. Each option may have any number of **configuration parameters**; each **configuration parameter** has some set of acceptable **values**.



1. An **AnalysisEngine** is composed of a **sequence** of **algorithms** or **options**. Each **option** accepts certain **data types** as **input** and produces certain **data types** as **output**. Each **option** is implemented by a specific **Java class**. Each **option** has some number of **configuration parameters**; each **configuration parameter** has a specific assigned **value**.



1. Assume that an IntelligentInformationSystem has the responsibility to produce a set of AnalysisEngines that represent all of the possible data flows in the IntelligentInformationSystem.

Draw a UML Sequence Diagram to show the sequence of messages required to a) read the information from the IntelligentInformationSystem instance, b) instantiate the corresponding AnalysisEngine instances, and c) store the AnalysisEngine instances in a List, which is the final output of the program. The message and return value for this use case are illustrated below.

